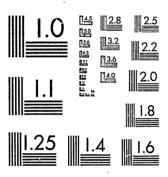
National Criminal Justice Reference Service

# ncjrs

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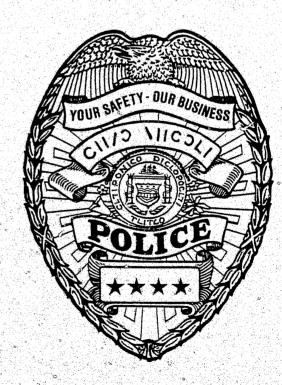
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National Institute of Justice United States Department of Justice Washington, D.C. 20531

**CRIME STOPPERS CATALOG** 

REFERENCE GUIDE

RESEARCH INFORMATION AND TECHNICAL ASSISTANCE AVAILABLE FROM FEDERAL RESEARCH LABORATORIES TO ASSIST LOCAL GOVERNMENT PUBLIC SAFETY FUNCTIONS



SOUTHWEST INNOVATION GROUP INC.

Anaheim Civic Center Suite 220 200 South Anaheim Boulevard Anaheim, CA 92805

U.S. Department of Justice National Institute of Justice 83218

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CRIME STOPPERS CATALOG

April 1982

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NCJRS

MAY 17 1982

Α

ACQUISITIONS

REFERENCE GUIDE

to

Research information and technical assistance available from Federal Research Laboratories to assist local government public safety functions.

Prepared by Allan Sjoholm & Associates

Some of the materials incorporated in this work were developed with the financial support of the National Science Foundation, Grant No. ISP-7917656, through:

SOUTHWEST INNOVATION GROUP, INC.
ANAHEIM CIVIC CENTER
200 South Anaheim Blvd., Suite 220
Anaheim, CA 92805

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April 1982

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#### INTRODUCTION

The Southwest Innovation Group in cooperation with the Federal Laboratory Consortium (FLC) and its participating labs is pleased to provide to local governments this catalog of technical expertise and resource information pertinent to local government public safety functions.

The FLC is composed of approximately 200 of the largest Federal government research and development laboratories and centers. These laboratories and centers represent eleven Federal agencies including the Departments of Defense, Health and Human Services, Transportation, Energy, Interior, Justice, and Commerce, as well as the Tennessee Valley Authority, the Environmental Protection Agency, the National Aeronautics and Space Administration, and the Department of Agriculture. The FLC represents a large national investment in scientific facilities, equipment capabilities and experience through its member agencies and laboratories. These laboratories represent an important source of technology that, when properly mobilized, can assist in the solutions to many of our nation's problems.

## How to Use This Publication

This publication provides a reference guide which shows subject areas of potential interest and the Federal lab the reader can contact for additional information. It has been designed and prepared for the specific use of local law enforcement officials.

Contained in this catalog are a very wide range of resources that can be made available to local law enforcement officials. There are 32 laboratories represented, 42 subject areas, and 208 individual items. The nature of the possible support includes publications, consultant expertise, training courses, technical data and information, and loan of specialized equipment. It is hoped that utilization of this report will help to open productive channels of communication between the FLC laboratories with their available resources, and the intended user community of local law enforcement officials.

The user can call the individual listed under the item that he/she is interested in, or, in the event of a problem, the Technology Transfer Representative of the laboratory identified in the preceding section of the catalog:

In the Far West Region of the FLC, additional assistance may be obtained from the following:

Mr. George F. Linsteadt FLC Secretariat Naval Weapons Center Code 3803 China Lake, CA 93555 (714) 939-2305/2575

Dr. Gerald T. Richards
Far West Regional Coordinator
Lawrence Livermore Laboratory
University of California
P. O. Box 808 L404
Livermore, CA 94550
(415) 422-6416

In some cases the reader may want SIG to assist them in making a contact with a Federal Lab and since SIG staff has worked with the labs on numerous occasions, it could assist in obtaining information for a local government agency.

#### Acknowledgments

Information for this publication was obtained by Allan Sjoholm & Associates under contract with SIG. Mr. Sjoholm has himself served as a Technology Transfer Coordinator in a Federal Laboratory and as Science Advisor to the City and County of San Diego.

All FLC member laboratories were surveyed. Those laboratories who responded by submitting material are listed along with their Technology Transfer Coordinator in the next section of the report.

During the gathering of data and preparation of the report, close coordination was maintained with Mr. George F. Linsteadt, FLC Secretariat, Dr. Gerald T. Richards, Far West Region Coordinator, and Mr. William A. Barr, Public Safety Technical Specialty Coordinator.

Many of the reports and standards contained in our listing came from the Law Enforcement Standards Laboratory (LESL) which is a part of the National Institute of Justice (NIJ) and its Technology Assessment Program. The NIJ in turn is under the National Bureau of Standards of the U.S. Department of Commerce. LESL and NIJ work in cooperation with the International Association of Chiefs of Police (IACP) in a continuing program in which selected items are tested by independent

testing laboratories. The complete test results are published by the IACP Technology Assessment Program Information Center (TAPIC) and they are the sponsors of the work. New publications are constantly under development and many are frequently updated. The users should be aware of the need to check accordingly. As many publications as possible are listed in this catalog for ready reference purposes; however, the SIG Program Office will keep abreast of additions and changes and should be called upon for that purpose.

There are many subject areas included; however, if a specific requirement is not covered, the reader should still contact the SIG Program Office which will then submit a direct request for assistance to the FLC to determine if needed help is available.

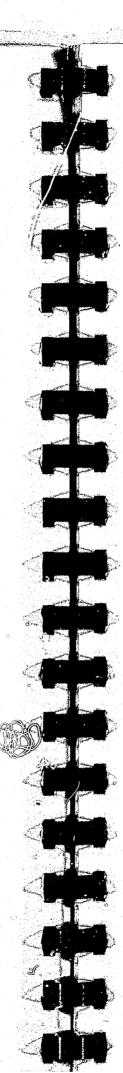
By publishing this catalog the Southwest Innovation Group hopes to provide the means and opportunity for local law enforcement officials to draw upon new and different sources of technical assistance to help them in the high priority task of combating crime. Crime is a problem of prime concern for all citizens, and all available resources should be brought to bear on it. Hopefully, this publication is a positive step in that direction.

Leslie R. White President Southwest Innovation Group

# PARTICIPATING LABORATORIES

AND

TECHNOLOGY TRANSFER COORDINATORS



# **LABORATORIES**

Air Force Weapons Laboratory AFWL/CA Kirtland AFB New Mexico 87117

Argonne National Laboratory 9700 So. Cass Avenue Argonne, IL 60439

Army Armament R&D Command LCWSL-DRDAR-LCE-C Dover, N.J. 07801 (201) 328-2560

Army Human Engineering Laboratory Aberdeen, MD 21005

Army Materials and Mechanics Research Center Watertown, MA 02172

Brookhaven National Laboratory Upton, N.Y. 11973

Department of the Army
U. S. Army Engineer Topographic
Laboratories
Fort Belvoir, VA 22060

Federal Aviation Administration Technical Center Atlantic City, N.J. 08405

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Technology Transfer Manager

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Technology Utilization Officer
Building 460
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Mr. Kenneth R. Kothe Director, Programs and Resources (703) 664-4812

Mr. James Woodall Tech. Advisor to the Director Building 12, ANA-1A (609) 641-8200 X-2658

#### Laboratories

Federal Bureau of Investigation Department of Justice FBI Laboratory FBI Academy Quantico, VA 22135

Forest Serv\_ce USDA Equipment Development Center Missoula, MT 59801

Forest Service USDA Equipment Development Center San Dimas, CA 91773

Harry Diamond Laboratory 2800 Powder Mill Road Adelphi, MD 20783

Lawrence Berkeley Laboratory University of California Berkeley, CA 94720

Lawrence Livermore National Laboratory P. O. Box 808 Livermore, CA 94556

Law Enforcement Standards
Laboratory (LESL)
National Bureau of Standards
Washington, D. C. 20234

NASA Ames Research Center Moffett Field, CA 94035

NASA Langley Research Center Hampton, VA 23665

#### Coordinators

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Mr. Farnum M. Burbank USDA/FS P. O. Box 2417 Washington, D. C. 20013 (703) 235-8114

Mr. Farnum M. Burbank USDA/FS P. O. Box 2417 Washington, D. C. 20013 (703) 235-8114

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Dr. Gerald T. Richards P. O. Box 808 L-404 (415) 422-6416

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Mr. Lawrence K. Eliason Chief, LESL Building 221, Room B157 (301) 921-3161

Mr. Stan Miller New Technology Representative (415) 965-6471

Mr. Lester J. Rose Technology Utilization and Applications Program Office (804) 827-3281

#### Laboratories

NASA Lewis Research Center 21000 Brookpark Road Cleveland, OH 44135

National Bureau of Standards A402 Administration Building Washington, D. C. 20234

Naval Civil Engineering Laboratory Port Hueneme, CA 93043

Naval Health Research Center P. O. Box 85122 San Diego, CA 92138

Naval Ocean Systems Center San Diego, CA 92152

Naval Surface Weapons Center White Oak, Silver Spring, MD 20910

#### Coordinators

Mr. Harrison Allen, Jr. Technology Utilization Officer (216) 433-4000 X-422

Mr. James Wyckoff (301) 921-3814

Mr. James F. Jenkins Lo3C (805) 982-4070

Mr. Gary Cook General Engineer Military Projects Division

LCDR. John C. Ferguson Technology Transfer Officer (714) 225-2061

Mr. Walt Perkins Code 013(B) (714) 225-7455

Mr. C. W. Lufcy Electromagnetics Branch Chief (R43) (202) 394-2725

Mr. D. L. Love Chief Electric - Optics Branch Code (R42) (202) 394-1974

Mr. P. W. Hesse Nuclear Branch Chief Code R41 (202) 394-2267

Dr. Sherman Gee Code D-21 Technology Transfer Coordinator (202) 394-1505

#### Laboratories

Naval Underwater Systems Center New London, CT 06320

Naval Weapons Center China Lake, CA 93555

Navy Personnel Research and Development Center San Diego, CA 92152

Night Vision and Electro-Optics Laboratory Fort Belvoir, VA 22060

Oak Ridge National Laboratory TU/C
P. O. Box X
Oak Ridge, TN 37830

Rome Air Development Center/IRRA Griffess AFB, NY 13441

U. S. Army Atmospheric Sciences Laboratory White Sands Missile Range NM 88002

U. S. Army Mobility Equipment Research & Development Command Fort Belvoir, VA 22060

U. S. Army Natick Research and Development Command Natick, Mass. 01760

#### Coordinators

Mr. Michael Ahrens Head, Office of Special Programs Development Code 0702, Building 80T (203) 447-4908

Mr. George Linsteadt Head, R&D, Technology Utilization (714) 939-2305/2575

Mr. Harold H. Rosen Code 303 (714) 225-7450/7286

Mr. Richard W. Fulton (703) 664-5605

Mr. Donald Jared (615) 574-4193

Capt. Joe Nelson, USAF (315) 330-7672

Mr. David Pierce Technology Transfer Coordinator Code RADC-DOT (315) 330-2973

Mr. Robert E. Northrop, Jr. DELAS-DP (505) 678-5236

Ms. Margaret C. Harrisson Industrial Liaison Specialist Office of the Special Assistant for Science & Technology (703) 664-1068

Mr. Nick Montanarelli Chief of Program Management Division FEL ATTN: DRDNA-WA (617) 633-5172 **SUBJECT AREAS** 

#### **SUBJECT AREAS**

# **POINTS OF CONTACT**

# 1. ACCIDENT INVESTIGATION

a. Expertise in investigating accidents and related events.

Lawrence Livermore National Laboratory University of California Livermore, CA 94550 Contact:

Mr. Robert G. Purrington, Fire Chief LLNL-P.O. Box 5505 L-384 Livermore, CA 94550

(415) 422-5241

#### 2. AMMUNITION

a. Report on evaluation of police handgun ammunition

LESP-RPT-0101.01, Oct 1975, "An Evaluation of Police Handgun Ammunition," Summary Report.

Law Enforcement Standards Laboratory(LESL) National Bureau of Standards Washington, D. C. 20234

#### 3. ARMOR PROTECTION

- a. Information and expertise in armor materials for personnel and vehicular protection. Special expertise in the areas of transparent armor and composite armor systems.
- b. Publication containing results of tests of body armor designed to measure the garment's resistance to bullets from the most frequer', used handguns and from reveral other less common firearms.

Army Materials and Mechanics Research Ctr. Watertown, MA 02172 Contact:
Mr. David W. Seitz
Technology Transfer Coordinator

Director, AMMR, Attn: DRX MR-PP (617) 923-5527

"Police Body Armor Testing and Summary of Performance Testing Data."

Equipment Technology Center
Technology Research Division
Bureau of Operations and Research
International Association of Chiefs of
Police
Gaithersburg, MD 20760

1978 plus supplements. Sponsored by Technology Assessment Program Information Center (TAPIC) and National Institute of Justice (NIJ).

#### 4. BOMB DISARMAMENT

a. Publication on standards for x-ray systems for bomb disarmament.

NILECJ-STD-0603.00, June 1975, "X-ray Systems for Bomb Disarmament," (GPO: Stock No. 027-000-00343-5, price 45 cents.)

Law Enforcement Standards Laboratory(LESL) National Bureau of Standards Washington, D. C. 20234

#### 5. BURGLAR ALARMS

a. Report on mechanically activated switches for burglar alarm systems.

NILECJ-STD-0302.00 May 1974, "Mechanically Actuated Switches for Burglar Alarm Systems."

Law Enforcement Standards Laboratory (LESL) National Bureau of Standards Washington, D. C. 20234

b. Publication on standards for magnetic switches for burglar alarm systems. NILECJ-STD-0301.00 March 1974, "Magnetic Switches for Burglar Alarm Systems." (NTIS: PB-231 32317; PC A03)

Law Enforcement Standards Laboratory (LESL) National Bureau of Standards Washington, D. C. 20234

c. Publication on standards for mercury switches for burglar alarm systems. NILECJ-STD-0303.00 May 1974, "Mercury Switches for Burglar Alarm Systems." (NTIS: PB-238 790/OST, PC A02, MP A011).

Law Enforcement Standards Laboratory (LESL) National Bureau of Standards Washington, D. C. 20234

#### 6. CHEMICAL ANALYSIS

a. Expertise in chemical analysis for fires and accidents.

Lawrence Livermore National Laboratory
University of California
Livermore, CA 94550
Contact: Mr. Robert G. Purrington
Fire Chief, LLNL-P.O. Box 5505
L-384
Livermore, CA 94550
(415) 422-5241

#### Subject Areas

#### FLC Labs - Points of Contact

# 7. COMMUNICATIONS

a. Report on batteries used with law enforcement communications equipment (comparison).

LESP-RPT-0201.00 May 1972, "Batteries Used with Law Enforcement Communications Equipment: Comparison and Performance Characteristics." (NTIS: PB-221 47517; PC A03, MF A01)

Law Enforcement Standards Laboratory(LESL) National Bureau of Standards Washington, D. C. 20234

b. Report on batteries used with law enforcement communications equipment (charging).

LESP-RPT-0202.00 June 1973, "Batteries Used with Law Enforcement Communication Equipment: Charges and Charging Techniques." (NTIS: PB-221 475/7; PC A03, MF A01)

Law Enforcement Standards Laboratory(LESL) National Bureau of Standards Washington, D. C. 20234

c. Report on voice privacy equipment for law enforcement systems.

LESP-RPT-0204.00 May 1974, "Voice Privacy Equipment for Law Enforcement Communications Systems." (NTIS: PB-242 053/7ST; PC A03, MF A01)

Law Enforcement Standards Laboratory (LESL) National Bureau of Standards Washington, D. C. 20234

d. Report on law enforcement communications equipment technical terms and definitions.

LESP-RPT-0203.00 June 1973, "Technical Terms and Definitions Used with Law Enforcement Communications Equipment (Radio Antennas, Transmitters, and Receivers). (NTIS: PB 221 438/5; PC A06, MF A01)

Law Enforcement Standards Laboratory(LESL) National Bureau of Standards Washington, D. C. 20234

#### FLC Labs - Points of Contact

e. Report on repeaters for law enforcement communications systems.

LESP-RPT-0206.00 Oct 1974, "Repeaters for Law Enforcement Communication Systems." (NTIS: PB-242 012/3ST; PC A02, MF A01)

Law Enforcement Standards Laboratory(LESL) National Bureau of Standards Washington, D. C. 20234

f. Expertise to Taview specifications, take field measurements, recommend anterna layout, and recommend equipment to local fire and police departments for communications.

Naval Underwater Systems Center New London, CT 06320 Contact:

Mr. Michael C. Ahrens Head Office of Special Programs Development Code 0702, Building 80T (203) 447-4908

g. Technical expertise in writing and developing specifications for communications systems. Naval Weapons Center
China Lake, CA 93555
Contact:
 Mr. George F. Linsteadt
 Head IR&D/Technology Utilization
 (714) 939-2305/2575

h. Publication on standards for FM repeater systems.

NILECJ-STD-0213.00 Nov 1977, "FM Repeater Systems." (NTIS: PB-277 323/2ST)

Law Enforcement Standards Laboratory (LESL) National Bureau of Standards Washington, D. C. 20234

i. Publication on standards for body-worn FM transmitters. NILECJ-STD-0214.00 Dec 1978, "Body-Worn FM Transmitters." (GPO: Stock No. 027-000-00711-2, price \$1.20)

Law Enforcement Standards Laboratory (LESL) National Bureau of Standards Washington, D. C. 20234

j. Publication on standards for microphone cable assemblies for mobile FM transceivers. NIJ Standard - 0217.00 Aug 1980, "Microphone Cable Assemblies for Mobile FM Transceivers." (GPO: Stock No. 027-000-01031-8, price \$1.25)

Law Enforcement Standards Laboratory (LESL) & National Bureau of Standards Washington, D. C. 20234

#### Subject Areas

k. Publication containing results of tests of 26 personal FM radio transceivers as compared to minimum performance requirements specified by National Institute of Justice law enforcement equipment standards.

"Police Personal FM Transceivers Report, Volume I, Executive Summary." Sep 1981.

FLC Labs - Points of Contact

International Association of Chiefs of Police Eleven Firstfield Road Gaithersburg, MD 20878

Sponsored by Technology Assessment Program Information Center (TAPIC) and National Institute of Justice (NIJ)

1. Publication on standards for continuous signal-controlled selective signaling.

NIJ Standard-0219.00 Aug 1980, "Continuous Signal-Controlled Selective Signaling." (GPO: Stock No. 027-000-01041-5, price \$1.75)

Law Enforcement Standards Laboratory(LESL) National Bureau of Standards Washington, D. C. 20234

m. Publication on standards for fixed and base station FM transmitters.

NILECJ-STD-0201.00 Sep 1974, "Fixed and Base Station FM Transmitters." (NTIS: PB-255 870/8ST)

Law Enforcement Standards Laboratory (LESL) National Bureau of Standards Washington, D. C. 20234

n. Publication of standards
 for mobile FM trans mitters.

NILECJ-STD-0202.00 Oct 1974, "Mobile FM Transmitters." (NTIS: PB-241 607/1ST PC A02, MF A01)

Law Enforcement Standards Laboratory(LESL) National Bureau of Standards Washington, D. C. 20234

 New publication of standards for fixed and base station antennas (now in press). NIJ Standard-0204-01, "Fixed and Base Station Antennas."

Law Enforcement Standards Laboratory (LESL) National Bureau of Standards Washington, D. C. 20234

#### FLC Labs - Points of Contact

p. Publication on standards for mobile antennas.

NILECJ-STD-0205.00 May 1974, "Mobile Antennas."

Law Enforcement Standards Laboratory (LESL) National Bureau of Standards Washington, D. C. 20234

q. Publication on standards for RF coaxial cable assemblies for mobile transceivers.

NILECJ-STD-0212.00 Sep 1975, "RF Coaxial Cable Assemblies for Mobile Transceivers."

Law Enforcement Standards Laboratory (LESL) National Bureau of Standards Washington, D. C. 20234

r. Publication on batteries for personal/portable transceivers.

NILECJ-STD-0211.00 Jun 1975, "Batteries for Personal/Portable Transceivers." (NTIS: PB 251-594/8ST; PC A02, MF A01)

Law Enforcement Standards Laboratory (LESL) National Bureau of Standards Washington, D. C. 20234

s. Publication on standards for mobile FM receivers.

NILECJ-STD-0207.00 Jun 1975, "Mobile FM Receivers."

Law Enforcement Standards Laboratory (LESL) National Bureau of Standards Washington, D. C. 20234

t. Publication on standards FM receivers.

NILECJ-STD-0206.00 Sep 1975, "Fixed and for fixed and base station Base Station FM Receivers." (GPO: Stock No. 027-000-00358-3, price 55 cents. NTIS: PB-255 906/OST; PC A02, MF A01)

> Law Enforcement Standards Laboratory (LESL) National Bureau of Standards Washington, D. C. 20234

u. Expertise in development of requirement definition and design of proposed city-wide emergency command and control Communications system.

System Analyses and Computer Modeling (Contractor, Contact/Contractor, TEF 514, Case Nos. 103399, 103400, 11/78) Jet Propulsion Laboratory Contact:

Mr. Stan Miller New Technology Representative NASA Ames Research Center Moffet Field, CA 94035 (415) 965-6471

#### Subject Areas

FLC Labs - Points of Contact

v. Information about flat cable interconnection/ termination components used in manufacturing voice communication such as mobile systems used by police departments.

Flat Conductor Cable Connector Survey (TB/TSP, TEF 535, Cases Nos. 92532, 93278, 10/78)

Contact:

Mr. Stan Miller New Technology Representative NASA Ames Research Center Moffet Field, CA 94035

w. Report on digital data transmission tests on voice channels.

NBS Special Publication 480-19 Jul 1977, "Digital Data Transmission Tests on Voice Channels." (NTIS: PB-270 280/1ST; PC A04, MF A01)

Law Enforcement Standards Laboratory (LESL) National Bureau of Standards Washington, D. C. 20234

x. Report on digital communications techniques and equipment for law enforcement use.

NBS-GCR-81-356, Dec 1981, "Digital Communications Techniques and Equipment for Law Enforcement Use."

Law Enforcement Standards Laboratory (LESL) National Bureau of Standards Washington, D. C. 20234

y. Guide on voice scramblers for law enforcement agencies.

NBS Special Publication 480-8 Dec 1976, "A Guide to Voice Scramblers for Law Enforcement Agencies." (NTIS: PB-264 668/5ST; PC A03, MF A01)

Law Enforcement Standards Laboratory (LESL) National Bureau of Standards Washington, D. C. 20234

z. Guide on communication systems.

NBS Special Publication 480-12, Jan 1979, "Communication Systems Guide." (GPO: Stock No. 003-003-020125)

Law Enforcement Standards Laboratory (LESL) National Bureau of Standards Washington, D. C. 20234

aa. Technical information about the development of special optical/infrared sensor technology and equipment for surveillance and communications applications.

bb. Information about strategic and tactical secure communications systems and equipment.

cc. Technical information about new developments for high data rate communication, surveillance and signal processing systems.

dd. Information on research to compare the immunity of fiber optic and wire systems and components to the electromagnetic pulse resulting from the detonation of nuclear weapons.

#### FLC Labs - Points of Contact

Naval Ocean Systems Center San Diego, CA 92152

Contacts: Mr. N. R. Ortwein (714) 225-7824

Dr. K. Bromley (714) 225-7028

Mr. M. A. Monahan (714) 225-7991

Naval Ocean Systems Center San Diego, CA 92152

Contacts: Mr. S. W. Dargis (714) 225-2831

Mr. D. C. Jacobson (714) 225-2831

Mr. J. J. Wilson (714) 225-2831

Naval Ocean Systems Center San Diego, CA 92152

Contacts: Dr. D. L. Lile (714) 225-6591

Mr. H. H. Wieden (714) 225-6591

Naval Ocean Systems Center San Diego, CA 92152

Contacts:

R. A. Greenwell (714) 225-2221

G. Kosmos R. A. Kochanski Subject Areas

FLC Labs - Points of Contact

# 8. COMPUTERIZED FUEL DISPENSING

a. Report of a computerized fuel dispensing system developed for the New York City Police Department. The new dispensing system results in cost savings by halting the unauthorized dispensing of gasoline and eliminating significant man years of labor attributed to pump attendants.

"New York City Police Department Automated Fuel Monitoring System, Vol. I - Overview." William J. McGrath, Margaret M. McNamara, NOSC Tech Report 6567-1, Oct 1981.

The second secon

Naval Underwater Systems Center
New London, CT 06320
Contact:
Mr. Michael Ahren
Head Office of Special Programs
Development
Code 0702, Building 80T
(203) 447-4908

# 9. CRIME LABORATORY PERSONNEL TRAINING

a. Scientific courses available to crime laboratory personnel in the following areas:

Forensic Chromatography
Basic Chromatography
Practical High Pressure
Liquid Chromatography
for Forensic Chemists
Biochemical Methods in
Bloodstain Analysis
Advanced Bloodstain
Analysis In-Service
Sex Determination from
a Bloodstain
Laboratory Analysis in
Arson Matters

0.

Federal Bureau of Investigation
Department of Justice
FBI Laboratory
FBI Academy
Quantico, VA 22135
Contact:
Dr. Eugene Rieder
(703) 640-6131

#### FLC Labs - Points of Contact

#### 10. DISASTER PLANNING

- a. Information about a battery-powered communications system, sufficiently compact to be packed in a briefcase container which can send and receive signals over great distances by means of satellite relay. Intended for use in emergency situation where power failure disrupts conventional communications.
- b. Information and expertise in determining radiological hazards of radiation sources to man and his environment including the distribution occurrence of natural and man-made radioactive compounds. Areas include radiation shielding, radiochemical and atomic detection techniques for material and chemical analyses. All aspects of radiation covered.

NASA Spinoff 1979, P 99.

NASA Langley Research Center Hampton, VA 23665

Contact:

era etinen jo nago i nuarringuagi. (Janongo, agonogo i jajung goji ji jajung goji ji ji ji jajung goji jajung Makada Mada Maringo, ang ngangangangan pagawa na haja sanah panahan ng pagaman na haja da da da da da da da da

> Mr. Lester Rose Technology Utilization and Applications Office (804) 827-3281

Naval Surface Weapons Center White Oak Silver Spring MD 20910

Contact:

Mr. P. W. Hesse Nuclear Branch Chief Code R41 (202) 394-2267

#### Subject Areas

#### FLC Labs - Points of Contact

c. Report on an operational system for constructing fire line with explosives.

"An Operational System for Constructing Fireline with Explosives." ED&T20004 Explosives for fireline construction, Jun 1975.

Forest Service, USDA Equipment Development Center Missoula, MT 59801

d. Report on the use of water gel explosives for building fire line. "Water Gel Explosives for Building Fire Line." Jul 1978, ED&T 2697

Forest Service, USDA Equipment Development Center Missoula, MT 59801

e. Report on grenade launcher for remote ignition of forest fuels for hazard reduction.

"Field Evaluation, M-79 Grenade Launcher." ED&T 1710 Fire and Line Holding Devices, Feb 1973.

Forest Service, USDA Equipment Development Center Missoula, MT 59801

f. Information about an electronic lighting system designed for emergency and supplemental use. Advantages are extremely high, light output with very low energy drain, compactness, light weight and high reliability.

NASA Spinoff 1977, P 82.

NASA Langley Research Center Hampton, VA 23665 Contact:

Mr. Lester Rose Technology Utilization and Applications Office (804) 827-3281

g. Information about availability of special suits and protective clothing for fire fighting personnel where workers are exposed to high heat and such hazards as steam and hot liquids.

NASA Spinoff 81, P 72

NASA Langley Research Center
Hampton, VA 23665
Contact:
Mr. Lester Rose
Technology Utilization and Applica-

tions Office (804) 827-3281

#### FLC Labs - Points of Contact

h. Resources for nuclear emergency search team.

i. Information on the

programs on portable

resulting from the

toxic chemicals.

accidental release of

Lawrence Livermore National Laboratory University of California Livermore, CA 94550 Contact: Mr. Robert G. Purrington, Fire Chief LLNL-P.O. Box 5505 L-384 Livermore, CA 94550

development of computer desk top computers to graphically depict downwind hazard corridors

Department of the Army U.S. Army Atmospheric Sciences Laboratory White Sands Missile Range, NM 88002

Contact: Mr. Carl Wright (505) 678-3504

(415) 422-5241

j. Information about a plastic coating that makes fabrics flameand abrasion-resistant and is sealed to the fabric by heat. The coating produces flexible, lightweight, impermeable fabrics that are firesafe and can withstand rough use.

"Flame-Retardant Coating," Lyndon B. Johnson Space Center, Houston, TX Contact: Mr. Stan Miller

New Technology Representative NASA Ames Research Center Moffet Field, CA 24035. (415) 965-6471

k. Fire test laboratory and training.

Lawrence Livermore National Laboratory University of California Livermore, CA 94550 Contact:

Mr. Robert G. Purrington, Fire Chief LLNL-P.O. Box 5505 L-384 Livermore, CA 94550 (415) 422-5241

1. Report on psychological deterrents to nuclear theft.

NBSIR 80-2038, Jun 1980, "Psychological Deterrents to Nuclear Theft: An Updated literature review and bibliography."

Law Enforcement Standards Laboratory (LESL) National Bureau of Standards Washington, D. C. 20234

#### Subject Areas

Information about the Ribbon Bridge which is a continuous floating, modular bridge with integral super-structure Contact: and floating supports capable of supporting 60-ton loads in normal crossings in currents up to 8 ft. per second and 80-ton loads under controlled conditions. These Ribbon Bridges were used in recovery operations for Air Florida Flight 90 which crashed into the 14th Street Bridge, Washington, D. C. The abbreviated bridge formed a causeway for everyone and everything being transferred from ship to shore.

#### FLC Labs - Points of Contact

U. S. Army Mobility Equipment Research and Development Command Fort Belvoir, VA 22060

Mr. Marvin Wilkins Bridge Division, Marine and Bridge Laboratory ATTN: DRDME-MD (703) 664-5326

A number of "National Nuclear Corporation" hand-held, battery powered, personnel/ vehicle Special Nuclear Material search and survey monitors are available on a limited basis. Items are similar to detectors used by the Illinois State Police. Training in the use of equipment could be made locally available.

Argonne National Laboratory 9700 So. Cass Avenue Argonne, IL 60439

Contact: Mr. Bruce C. Huguelet Technology Transfer Manager Building 362, Room E209 (312) 972-3064

Information on research efforts to determine the feasibility of using electromagnetic (EM) energy to thaw frozen blood products for clinical use.

Naval Ocean Systems Center San Diego, CA 92152

Contacts: Dr. W. T. Rasmussen (714) 225-6471

Ms. N. L. Campbell (714) 225-6542

- p. Information on research to automate various medical systems, i.e., automated interpretation of electrocardiograms and automated cardiac catherization systems.
- Information on research concerned with the developing of technology necessary to provide teleoperator systems operators with on-thescene "presence" at remote hazardous locations. Situations where such systems might provide the operator with a safe on-the-scene presence include emergency rescue and repair and handling of nuclear biological and chemical materials.
- r. Information on research to develop a remote medical diagnosis system for effective medical data transfer that would include patient records, test results, electrocardiograms, patient images, x-ray images, heart lung sounds and verbal information.
- s. Information on research to develop an underwater vehicle technology for the inspection of pipelines, oil and gas structures, drill platforms and the like by means of unmanned free-swimming submersibles.

#### FLC Labs - Points of Contact

Naval Ocean Systems Center San Diego, CA 92152

Contacts: Dr. W. T. Rasmussen (714) 225-6471

Mr. I. N. Stevens (714) 225-6542

Naval Ocean Systems Center San Diego, CA 92152

Contacts:

D. C. Smith (808) 254-4434 (H1)

F. P. Armogida (808) 254-4406 (H1)

J. K. Katayma
(808) 254-4400

Naval Ocean Systems Center San Diego, CA 92152

Contacts:

Dr. W. T. Rasmussen (714) 225-6471

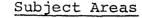
I. Stevens (714) 225-6542

Mr. P. D. Hayes (714) 225-6542

Naval Ocean Systems Center San Diego, CA 92152

Contact:

Mr. P. J. Heckman (714) 225-6686



#### FLC Labs - Points of Contact

# 11. DRUGS

a. Publication on standards for chemical spot test kits for preliminary identification of drugs of abuse.

NILECJ-STD-0604.00 Dec 1978, "Chemical Spot Test Kits for Preliminary Identification of Drugs of Abuse." (GPO: Stock No. 027-000-00730-9, price \$1.10)

Law Enforcement Standards Laboratory (LESL) National Bureau of Standards Washington, D. C.20234

b. Publication on color test Reagents/Kits for preliminary identification of drugs of abuse. NIJ Standard-0605.00 Jul 1981, "Color Test Reagents/Kits for Preliminary Identification of Drugs of Abuse." (GPO: Stock No. 027-000-01116-1, price \$2.00)

Law Enforcement Standards Laboratory(LESL) National Bureau of Standards Washington, D. C. 20234

c. Standards on evidential breath testers for alcohol content.

38FR30459 Nov 1973, "Evidential Breath Testers for Alcohol Content." (Federal Register, Vol. 38, No. 212 PP 30459-30463, Nov 5, 1973.)

Law Enforcement Standards Laboratory (LESL) National Bureau of Standards Washington, D. C. 20234

d. Standards on calibrating units for breath alcohol testers.

40FR36167 Aug 1975, "Calibrating Units for Breath Alcohol Testers." (Federal Register, Vol. 40, No. 161, PP 36167-36171, Aug 19, 1975)

Law Enforcement Standards Laboratory (LESL) National Bureau of Standards Washington, D. C. 20234

e. Expertise on the impact of alcohol abuse on health and performance.

Naval Health Research Center P. O. Box 85122 San Diego, CA 92138 Contact: LCDR John C. Ferguson

Technology Transfer Officer (714) 225-2061

#### FLC Labs - Points of Contact

f. New test report under preparation on narcotic test kits.

Sponsored by Technology Assessment Program Information Center (TAPIC) and National Institute of Justice (NIJ)

Law Enforcement Standards Laboratory(LESL) National Bureau of Standards Washington, D. C. 20234

g. Report on the hazard of benzidine to Criminal Justice personnel. NBS Special Publication 480-21 May 1977, "The Hazard of Benzidine to Criminal Justice Personnel." (NTIS: PB-267 611/2ST; PC A02, MF A01)

Law Enforcement Standards Laboratory(LESL) National Bureau of Standards Washington, D. C. 20234

h. Report on Breath
Alcohol Sampling
Simulator (BASS) for
qualification testing
of breath alcohol
measurement devices.

NBS Special Publication 480-41 Jul 1981, "Breath Alcohol Sampling Simulator (BASS) for Qualification Listing of Breath Alcohol Measurement Devices." (GPO: Stock No. 003-003-62336-1)

Law Enforcement Standards Laboratory(LESL) National Bureau of Standards Washington, D. C. 20234

## 12. EAVESDROPPING TECHNIQUES

a. Report on electronic eavesdropping techniques and equipment

LESP-RPT-0207.00 Sep 1975, "Electronic Eavesdropping Techniques and Equipment."

Law Enforcement Standards Laboratory (LESL) National Bureau of Standards Washington, D. C. 20234

## 13. EQUIPMENT

a. Report on patrol cars.

NBS Special Publication 480-7 Jun 1977. LEAA Police Equipment Survey of 1972, Vol. VII: "Patrol Cars." (GPO: Stock No. 003-003-01766-3, price \$2.40. NTIS: COM-74-11011/5; PC A07, MF A01)

#### Subject Areas

#### FLC Labs - Points of Contact

Law Enforcement Standards Laboratory (LESL) National Bureau of Standards Washington, D. C. 20234

 Report on body armor and confiscated weapons.

NBS Special Publication 480-6 Jun 1977. LEAA Police Equipment Survey of 1972, Vol. VI: "Body Armor and Confiscated Weapons." (GPO: Stock No. 003-003-01748-5, price \$2.20. NTIS: COM-74-11010/7; PC A06, MF A01)

Law Enforcement Standards Laboratory (LESL) National Bureau of Standards Washington, D. C. 20234

c. Report on alarms, security equipment and surveillance equipment.

NBS Special Publication 480-4, Jun 1977. LEAA Police Equipment Survey of 1972, Vol. IV: "Alarms, Security Equipment Surveillance Equipment." (GPO: Stock No. 003-003-01745-1, price \$2.75. NTIS: COM-74-11771/4SL; PC A07, MF A01)

Law Enforcement Standards Laboratory (LESL) National Bureau of Standards Washington, D. C. 20234

d. Report on sirens and emergency warning lights.

NBS Special Publication 480-3, Jun 1977. LEAA Police Equipment Survey of 1972, Vol. III: "Sirens and Emergency Warning Lights." (GPO: Stock No. 003-003-01744-2, price \$2.50. NTIS: COM-74-11609/9; PC A07, MF A01)

Law Enforcement Standards Laboratory (LESL) National Bureau of Standards Washington, D. C. 20234

e. Report on communications equipment and supplies.

NBS Special Publication 480-2, Jun 1977. LEAA Police Equipment Survey of 1972, Vol. II: "Communications Equipment and Supplies." (GPO: Stock No. 003-003-01723-0, price \$2.75. NTIS: COM-74-10950/5; PC A08, MF A01)

Law Enforcement Standards Laboratory (LESL) National Bureau of Standards Washington, D. C. 20234

#### FLC Labs - Points of Contact

f. Report on standards and priorities for police equipment.

NBS Special Publication 480-1, Jun 1977. LEAA Police Department Survey of 1972, Vol. I: "The Need for Standards - Priorities for Police Equipment." (GPO: Stock No. 003-003-01722-1, price \$3.00. NTIS: COM-74-11767/2SL; PC Al0 MF A01)

Law Enforcement Standards Laboratory (LESL) National Bureau of Standards Washington, D. C. 20234

g. Information on development of standards for equipment that is used by the law enforcement community which serve as the basis for the cost-effective purchase of such equipment. The areas of communication systems, security systems, forensic science, weapons, and protective equipment are included.

Law Enforcement Standards Laboratory (LESL) National Bureau of Standards Washington, D. C. 20234 Contact:

Lawrence K. Eliason, Chief, LESL National Bureau of Standards Building 221, Room B157 Washington, D. C. 20234 (301) 921-3161

h. Report on security equipment.

NBS Special Publication 480-35 Nov 1978, "Catalog of Security Equipment." (NTIS: PB-253-263)

Law Enforcement Standards Laboratory (LESL) National Bureau of Standards Washington, D. C. 20234

#### 14. EXPLOSIVE VAPOR DETECTORS

a. Report on a trace vapor generator for testing explosive vapor detectors. LESP-RPT-0604.00 Mar 1977, "A Trace Vapor Generator for Testing Explosive Vapor Detectors." (GPO: Stock No. 027-000-00453-9, price 65 cents.)

Law Enforcement Standards Laboratory(LESL) National Bureau of Standards Washington, D. C. 20234

#### Subject Areas

#### FLC Labs - Points of Contact

#### 15. EXPLOSIVES

a. Identification and detection through sophisticated instrumental analysis of known and unknown U.S. and foreign explosives. Both routine and specialized analysis can be undertaken on both bulk samples and microscopic residues from explosives. Training of forensic scientists and environmentalists provided in the analysis of explosives, and rapid response support provided to federal, state, and local law enforcement and intelligence officials. Expert testimony also provided together with advice and assistance in the tagging and safe handling of explosives.

Contact:
Dr. H. J. Matsuguma
Army Armament R&D Command
Building 407
Dover, N.J. 07801
(201) 328-2210

b. Development, simulation and analyses of explosions generated by conventional explosives, dusts, fuel-air mixture, etc. Hazards analyses of explosive substances, processes and operations. National military repository of data and equipment on sensitivity, properties, and performance testing of high explosives, propellants and pyrotechnics.

Army Armament R&D Command Dover, N.J. 07801 Contact:
Dr. N. Slagg
Building 3022
(201) 328-6150

#### FLC Labs - Points of Contact

c. A national technical information and analysis center on chemical explosives, their application in munitions/ weapons systems, their manufacturing technology, and related areas. This center is backed by a professional staff of about 120 practicing scientists and engineers who bring expertise to the various facets of the subject and by almost a century of accumulated experience and technology that has been developed on-site.

Army Armament R&D Command Dover, N.J. 07801 Contact: Mr. S. Kaye Building 3022 (201) 328-4604

d. Paper on perfluorocarbon vapor tagging of blasting cap detonators. "Perfluorocarbon Vapor Tagging of Blasting Cap Detonators," Oct 1978.
(U.S. patent 4, 256, 038, R. Dietz, Department of Energy and Environment, Brookhaven National Laboratory.
Access available through the U.S. Department of Energy, Counsel's Office, via R. Marchick, esq., U.S. DOE, Washington, D. C. Contact:

James Munson, ORTA, Building 475
Brookhaven National Laboratory
Upton, N.Y. 11973
(516) 282-2019

e. Paper on the detection of perfluorinated taggants in electric blasting caps.

"Detection of Perfluorinated Taggants in Electric Blasting Caps by Electronic Capture Monitors." Dietz, Goodrich, CoTE, Oct 1978.

Contact: J

James S. Munson
ORTA, Building 475
Brookhaven National Laboratory
Upton, N.Y. 11973
(516) 282-2019

#### Subject Areas

f. Expertise in research and development into explosive detection systems for civil air transportation.

- g. Information about soft fabric bag designed to contain blasts from explosive nuts and other pyrotechnic devices.
- h. Report on hydrocarbon vapor standards for performance evaluation of combustible gas detectors.

#### FLC Labs - Points of Contact

Federal Aviation Administration
Atlantic City, N.J. 08405
Contacts:
Mr. Chris Seher, ACT 420
Research & Development
Assistant Program Manager
TAA Tech Center
Atlantic City Airport, N.J. 08405
(609) 641-8200 X-3787 or 2506
Mr. Theo Tsacoomis, ACS 200
Program Manager
FAA Headquarters
Washington, D. C.
(703) 426-8490

"Soft Container for Explosive Nuts."
Lyndon B. Johnson Space Center
Houston, TX
Contact:
Mr. Stan Miller
New Technology Representative
NASA Ames Research Center
Moffet Field, CA 94035

(415) 965-6471

NBS Special Publication 480-43 Oct 1981, "Hydrocarbon Vapor Standards for Performance Evaluation of Combustible Gas Detectors." (GPO: Stock No. 003-003-02371-0)

Law Enforcement Standards Laboratory(LESL) National Bureau of Standards Washington, D. C. 20234

#### 16. FACIAL IDENSIFICATION

a. Report on image quality criterion for identification of faces. LESP-RPT-0303.00 May 1974, "Image Quality Criterion for Identification of Faces." (NTIS: PB-238 855/1ST; MF A01)

Law Enforcement Standards Laboratory(LESL) National Bureau of Standards Washington, D. C. 20234

#### FLC Labs - Points of Contact

#### 17. FACILITIES

a. Life cycle costing of law enforcement facilities.

LESP-RPT-0801.00 Oct 1974, "Life Cycle Costing Techniques Applicable to Law Enforcement Facilities." (NTIS: PB-241 829/1ST; PC A02, MF A01)

Law Enforcement Standards Laboratory (LESL) National Bureau of Standards Washington, D. C. 20234

b. Report on law enforcement facilities planning, design, construction. NBS Technical Note 859, Nov 1975,
"Literature Search: Law Enforcement
Facilities--Planning, Design, Construction." (NTIS: PB-248 647/OST; PC A10,
MF A01)

Law Enforcement Standards Laboratory (LESL) National Bureau of Standards Washington, D. C. 20234

#### 18. FIRING RANGES

a. Publication on standards for hearing protectors for use on firing ranges. NILECJ-STD-0102.00 Mar 1973, "Hearing Protectors for Use on Firing Ranges." (NTIS: PB-228 670/6; PC A02, MF A01)

Law Enforcement Standards Laboratory (LESL) National Bureau of Standards Washington, D. C. 20234

b. Report on the reduction of airborne lead in indoor firing ranges by using modified ammunition. NBS Special Publication 480-26 Nov 1977, "The Reduction of Airborne Lead in Indoor Firing Ranges by Using Modified Ammunition." (NTIS: PB-275 062/8ST; PC A03, MF A01)

Law Enforcement Standards Laboratory (LESL) National Bureau of Standards Washington, D. C. 20234

#### Subject Areas

c. Guide on hearing protectors for use on firing ranges.

d. Training is available on a limited basis for M-16 rifles with semi and automatic capabilities.

The Multiple Integrated Laser Engagement System (MILES) is available for a few months of the year. Device can be attached to the M-16 rifle, service revolver and 12 guage shotgun. Device is a training tool to simulate actual combat conditions, indicating hits and near misses by the use of an individually worn sensor system. Ideal for "shoot/don't shoot" situations, movement under fire, range training and other police type scenarios.

#### FLC Labs - Points of Contact

NILECJ-GUIDE-0101.00 Apr 1976, "Selection Guide to Hearing Protectors for Use on Firing Ranges." (GPO: Stock No. 027-000-00427-0)

Law Enforcement Standards Laboratory(LESL)
National Bureau of Standards
Washington, D. C. 20234

Argonne National Laboratory
9700 So. Cass Avenue
Argonne, IL 60439
Contact:
Mr. Bruce Huguelet
Building 362, Room E209
Technology Transfer Manager
(312) 972-3064

Argonne National Laboratory 9700 So. Cass Avenue Argonne, IL 60439

Contact:

Mr. Bruce Huguelet
Building 362, Room E209
Technology Transfer Manager
(312) 972~3064

# 19. FORENSIC SCIENCE

and a facility for conducting neutron activation analysis to accurately identify components and amount in a sample of unknown composition.

Contact:
Frank Asaro
70-103 Lawrence Berkeley Laboratory
Berkeley, CA 94720
(415) 486-5433

#### FLC Labs - Points of Contact

b. Report on collections of forensic science materials.

LESP-RPT-0601.00 Feb 1977, "Standard Reference Collections of Forensic Science Materials: Status and Needs." (GPO: Stock No. 027-000-00444-0, price \$1.55)

Law Enforcement Standards Laboratory (LESL) National Bureau of Standards Washington, D. C. 20234

c. Report on forensic utility of visible features of auto headlight glass.

"Auto Headlight Glass: Visible Features of Forensic Utility." NBS Special Publication, Feb 1978. (GPO: Stock No. 003-003-01857-1, price \$3.00. NTIS: PB-279 053/3ST, PC A07, MF A01)

Law Enforcement Standards Laboratory(LESL) National Bureau of Standards Washington, D. C. 20234

#### 20. GUNS

a. Report on handguns and handgun ammunition.

NBS Special Publication 480-4 Jun 1977 LEAA Police Equipment Survey of 1972, VOL. V: "Handguns and Handgun Ammunition." (GPO: Stock No. 003-003-01747-7, price \$2.20. NTIS: COM-74-11239/2, PC A06, MF A01)

Law Enforcement Standards Laboratory(LESL) National Bureau of Standards Washington, D. C. 20234

b. Information on process for restoring the once-obliterated serial number of a revolver. The process employs cavitation rather than chemical etching.

NASA Spinoff 1979, p 55. NASA Langley Research Center Hampton, VA 23665 Contact: Mr. Lester Rose

Mr. Lester Rose Technology Utilization and Applications Office (804) 827-3281

#### Subject Areas

c. Handbook on results of research on the techniques of the criminal investigator in the performance of serial number restoration. The handbook is primarily focused for use on handguns but can apply to any objects which have markings which have been obliterated intentionally or unintentionally. All known methods are compared, gun metals categorized and optimum methods for individual metals are described.

#### FLC Labs - Points of Contact

"Handbook of Methods for the Restoration of Obliterated Serial Numbers." Richard Trepton, NASA CR-135322

NASA Lewis Research Center
21000 Brookpark Road
Cleveland, OH 44135
Contact:
 Mr. Harrison Allen, Jr.
 Technology Utilization Officer
(216) 433-4000 X-42

#### 21. HANDCUFFS

a. Publication on standards for metallic handcuffs. (New report under preparation.)

b. Report on handcuff improvements.

NILECJ-STD-0307.00 Oct 1974, "Metallic Handcuffs." (GPO: Stock No. 027-000-00292, price 65 cents)

Law Enforcement Standards Laboratory (LESL) National Bureau of Standards Washington, D. C. 20234

NBSIR 80-1989 Apr 1980, "A Study of Handcuff Improvements."

Law Enforcement Standards Laboratory(LESL) National Bureau of Standards Washington, D. C. 20234

#### FIC Labs - Points of Contact

#### 22. HAZARDOUS WASTES

a. Identification and detection through sophisticated instrumental analysis of known and unknown U.S. and foreign hazardous wastes. Both routine and specialized analyses can be undertaken on both bulk samples and microscopic residues from pollutants. Expert testimony also provided, together with advice and assistance in the clean-up and disposal of hazardous wastes and deposits.

Army Armament R&D Command Dover, N.J. 07801 Contact: Dr. H. J. Matsuguma Building 407 (201) 328-2210

# 23. INTRUSION ALARM SYSTEMS

a. Report on terms and definitions for intrusion alarm systems.

LESP-RPT-0305.00 Oct 1974, "Terms and Definitions for Intrusion Alarm Systems." (NTIS: PB-255 872/4ST; PC A02 MF A01)

Law Enforcement Standards Laboratory (LESL) National Bureau of Standards Washington, D. C. 20234

#### Subject Areas

- Report on a sensitive acoustic emission detector has been developed that will detect an attempted forcible entry through block or tile walls, concrete floors, or concrete/steel vault walls. Useful where there is a need for inexpensive, sensitive systems to detect efforts to penetrate security barriers by means of hammering, drilling, or cutting.
- c. Publication on standards for metallic window foil for intrusion alarm systems.
- d. Publication on standards for sound sensing units for intrusion alarm systems.
- Report on test method for the evaluation of metallic window foil for intrusion alarm systems.

#### FLC Labs - Points of Contact

Oak Ridge National Laboratory
TU/C
P. O. Box X
Oak Ridge, TN 37830
Contact:
 Mr. Donald Jared
 (615) 574-4193

"Acoustic Emission Intrusion Detector"
Number 300
Contact:
 Mr. H. T. Kite
 Oak Ridge Y-12 Plant
 Union Carbide Corp. - Nuclear Division
 P. O. Box X
 Oak Ridge, TN 37830
 (615) 483-8611 X-35328

NIJ Standard - 0319.00 Aug 1980, "Metallic Window Foil for Intrusion Alarm Systems." (GPO: Stock No. 027-000-01010-5, price \$1.25)

Law Enforcement Standards Laboratory(LESL) National Bureau of Standards Washington, D. C. 20234

NILECJ-STD-0308.00 Mar 1977, "Sound Sensing Units for Intrusion Alarm Systems." (GPO: Stock No. 027-000-00452-1, price 45 cents)

Law Enforcement Standards Laboratory (LESL) National Bureau of Standards Washington, D. C. 20234

NBS Special Publication 480-34 Aug 1978, "Test Method for the Evaluation of Metallic Window Foil for Intrusion Alarm Systems." (NTIS: PB-285 118)

Law Enforcement Standards Laboratory(LESL) National Bureau of Standards Washington, D. C. 20234

#### FLC Labs - Points of Contact

f. Report on intruder detection using trace constituent analyses.

NBSIR 78-1510 May 1979, "Intruder Detection Using Trace Constituent Analyses."

Law Enforcement Standards Laboratory (LESL) National Bureau of Standards Washington, D. C. 20234

g. Guide on selection and application guide to commercial intrusion alarm systems. NBS Special Publication 480-14 Aug 1979, "Selection and Application Guide to Commercial Intrusion Alarm Systems." (NTIS: PB-300-604)

Law Enforcement Standards Laboratory (LESL) National Bureau of Standards Washington, D. C. 20234

h. Technical information about the Facilities Intrusion Detection System (FIDS) which is a standardized system used to protect secure areas from unauthorized access and/or unauthorized removal of protected items.

U. S. Army Mobility Equipment Research & Development Command
Fort Belvoir, VA 22060
Contact:
 Mr. Albert R. Zushin
 Physical Security Equipment Division
 Counter Surveillance/Counter Intrusion
 Laboratory
ATTN: DRDME-X1
(703) 664-4081

#### 24. LESS-LETHAL WEAPONS

a. Technical expertise devoted to supporting law enforcement with prime emphasis on less-lethal weapons.

b. Technical memorandum on the evaluation of different lesslethal weapons. Donald O. Egner
Director, USA Human Engineering Laboratory
ATTN: DRXHE-CC (Mr. D. Egner)
Aberdeen Proving Ground, MD 21005
(301) 278-3245/4687

"The Evaluation of Less-Lethal Weapons," Dec 1977, AMC M S Code 612716-H700011, Dec 1977 Donald O. Egner (301) 278-3245/4687

U. S. Army Human Engineering Laboratory Aberdeen Proving Ground, MD 21005

#### Subject Areas

#### FLC Labs - Points of Contact

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c. Technical memorandum on Los Angeles County Less-Lethal Task Force.

"Los Angeles County District Attorney's Less-Lethal Weapons Task Force," Jun 1976. AMCMS Code 690000-22.11, 079, Burton S. Katz, Donald O. Egner.

U.S. Army Human Engineering Laboratory Aberdeen Proving Ground, MD 21005

d. Technical memorandum on testing the Modi-Pac Round, the No. 4 Lead-Shot Round, and the Flying Baton.

"Weapon Performance Testing and Analysis: The Modi-Pac Round, The No. 4 Lead - Shot Round, and the Flying Baton," Technical Memo 4-76 - Brenda K. Thein, Donald O. Egner, Ellsworth B. Shank. Jan 1976

U.S. Army Human Engineering Laboratory Aberdeen Proving Ground, MD 21005

e. Technical memorandum on testing and evaluation of chemical weapons.

"Testing and Evaluation of Chemical Weapons." Technical Memo 21-75, Aug 1975, Donald O. Egner and Donald Campbell. AMCMS Code 960000

U.S. Army Human Engineering Laboratory Aberdeen Proving Ground, MD 21005

f. Technical memorandum on modeling for lesslethal chemical devices.

"Modeling for Less-Lethal Chemical Devices." Technical Memo 2-76, Jan 1976, Donald O. Egner and Donald Campbell.

U.S. Army Human Engineering Laboratory Aberdeen Proving Ground, MD 21005

g. Technical memorandum on scenarios for evaluating less-lethal weapons. "Standard Scenarios for the Less-Lethal Weapons Evaluation Model." Technical Memo 20-75, Aug 1975, AMCMS Code 690000 Donald O. Egner and Ellsworth B. Shank

U.S. Army Human Engineering Laboratory Aberdeen Proving Ground, MD 21005

h. Technical memorandum on modeling for lesslethal electrical devices.

"Modeling for Less-Lethal Electrical Devices." Technical Memo 3-76, Jan 1976, Donald O. Egner and Larry W. Williams.

U.S. Army Human Engineering Laboratory Aberdeen Proving Ground, MD 21005

#### FLC Labs - Points of Contact

#### 25. LIGHTING

a. Information about high intensity lighting products used by fire and police departments in security and emergency situations. High Intensity Arc Radiation (Personnel Contractor, TEF 561, Case No. 109327 6/80)
Contact:
Mr. Stan Miller

New Technology Representative NASA Ames Research Center Moffet Field, CA 94035 (415) 965-6471

NBS Special Publication 480-27 Nov 1977, "Security Lighting for Nuclear Weapons Storage Sites: A Literature Review and Bibliography." (NTIS: PB-274 998/4ST; PC A03, MF A01)

Law Enforcement Standards Laboratory(LESL) National Bureau of Standards Washington, D. C. 20234

#### 26. MATERIALS IDENTIFICATION

b. Report on security

weapons storage

sites.

lighting for nuclear

a. Paper on a technique for the identification of the origin of materials, or the determination of whether specific evidence are of the same origin. "Characterization of Materials by Means of Neutron Activation Analysis." Edward Sayre, Chemistry Department, Brookhaven National Laboratory Contact:

James S. Munson ORTA Building 475 Brookhaven National Laboratory Upton, N.Y. 11973 (516) 282-2019

#### 27. NIGHT VISION DEVICES

a. Report on evaluating the image quality of objective lenses for night viewing devices. LESP-RPT-0304.00 May 1974, "Simplified Procedures for Evaluating the Image Quality of Objective Lenses for Night Vision Devices." (NTIS: PB-238 567/2ST, MF A01)

Law Enforcement Standards Laboratory (LESL) National Bureau of Standards Washington, D. C. 20234

#### Subject Areas

#### FLC Labs - Points of Contact

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b. Report on image quality criteria for passive night vision systems.

LESP-RPT-0301.00 Jun 1974, "Survey of Image Quality Criteria for Passive Night Vision Devices."

Law Enforcement Standards Laboratory (LESL) National Bureau of Standards Washington, D. C. 20234

c. Report on testing procedure for night vision devices.

LESP-RPT-0302.00 Jul 1974, "Test Procedures for Night Vision Devices." (NTIS: PB-255 902/9ST; PC A03, MF A01)

Law Enforcement Standards Laboratory(LESL) National Bureau of Standards Washington, D. C. 20234

d. Report on forward looking infrared (FLIR) system for night helicopter operations. "Night Helicopter Operations," Jul 1975.

Forest Service USDA Equipment Development Center San Dimas, CA 91773

e. Report on night helicopter operations Containing information for flight crews on training and night vision goggles. "Night Helicopter Operations," Aug 1975.

Forest Service USDA Equipment Development Center San Dimas, CA 91773

f. Training guide for helicopter night flying for use of night vision goggles.

"Helicopter Night Flying - Flight Training for Use of Night Vision Goggles," Apr 1977, M07757 1801

Forest Service USDA Equipment Development Center San Dimas, CA 91773

g. Publication on standards for passive, first generation night vision devices. NILECJ-STD-0304.00 Jun 1975, "Passive, First Generation Night Vision Devices." (GPO: Stock No. 027-000-00325-7 price 30 cents)

Law Enforcement Standards Laboratory (LESL) National Bureau of Standards Washington, D. C.20234

# h. Publication on standards for active night vision devices.

# i. Short-term assistance is available for image intensification, thermal, or infrared devices as well as for low powered laser devices used for accurately determining ranges. Demonstrations of various devices may also be arranged.

j. "Star-tron Mk - 303A
Passive Night Vision
Systems available on a
minimum loan basis.
System is hand-held
and can be mounted on
the M-16 rifle. A
limited amount of
training can be made
available.

#### 28. PERSONAL ALARMS

a. Information about a silent sentry communications alarm network. Its principal elements are a pearshaped signaling device working on ultrasonic signals, and a system of receivers interconnected with a constantly monitored master console. For use in correctional institutions, court houses, industrial facilities and public buildings.

#### FLC Labs - Points of Contact

NILECJ-STD-0305.00 Jun 1975, "Active Night Vision Devices."

Law Enforcement Standards Laboratory(LESL) National Bureau of Standards Washington, D. C. 20234

Night Vision and Electro-Optics Laboratory Fort Belvoir, VA 22060 Contact: Mr. Richard W. Fulton Technology Transfer Agent (703) 664-5605

Argonne National Laboratory 9700 So. Cass Avenue Argonne, IL 60439 Contact: Mr. Bruce C. Huguelet Building 362, Room E209 Technology Transfer Manager (312) 972-3064

NASA Spinoff 1980, P 76.

NASA Langley Pesearch Center Hampton, VA 23665 Contact: Mr. Lester Rose Technology Utilization and Applications Office (804) 827-3281

#### Subject Areas

#### FLC Labs - Points of Contact

# 29. PERSONNEL

a. Report on anthropometry of law enforcement officers.

LESP-RPT-0701.00 Dec 1976, "Anthropometry of Law Enforcement Officers." (GPO: Stock No. 027-000-00458-0 Price \$3.30. NTIS: ADA-017 066/2ST; PC A12, MF A01)

Law Enforcement Standards Laboratory (LESL) National Bureau of Standards Washington, D. C. 20234

 Expertise in the design and development of recruiter selection instruments.

Navy Personnel Research and Development Center San Diego, CA 92152 Contact: Mr. Harold H. Rosen Code 303 (714) 225-7450/7286

c. Expertise in developing objective strength and stamina requirements demanded by occupational tasks.

Navy Personnel Research and Development Center San Diego, CA 92152 Contact: Mr. Harold H. Rosen Code 303 (714) 225-7450/7286

d. Expertise in assimilation and utilization of women and minority personnel.

Navy Personnel Research and Development Center San Diego, CA 92152 Contact: Mr. Harold H. Rosen Code 303

(714) 225-7450/7286

e. Expertise in developing physical security job requirements relating to the performance efficiency and reliability of the guard force.

Navy Personnel Research and Development Center San Diego, CA 92152 Contact: Mr. Harold H. Rosen Code 303 (714) 225-7450/7286

#### 30. PERSONNEL DETECTION

a. Technical support
available in techniques
and experience with
various experimental and
production systems.
Included are sensors and
systems for detection and
classification of intruders such as:

Rome Air Development Center/IRRA Griffess AFB New York, NY 13441 Contact: Capt. Joe Nelson, USAF (315) 330-7672

Buried cable sensors
Fence mounted sensors
Infrared mosaic imagery
cameras
Electronic techniques
for intruder
classification
Look-up sensors for
low altitude
aircraft.

b. Information and
expertise on advanced
electromagnetic techniques and sensors for
detecting, locating
and classifying targets.
Research and development concerning generation, propagation, and
detection of ultraviolet,
visible and infrared
portions of the electromagnetic spectrum.

c. Electromagnetic, infrared, and optical detection expertise and equipment available for use in personnel detection.

d. Expertise in area of infra-red detection.

Naval Surface Weapons Center
White Oak
Silver Spring, MC 20910
Contact:
 Mr. C. W. Lufcy
 Code R43
 Electromagnetics Branch Chief
 (202) 394-2725
 Mr. D. L. Love
 Code R42
 Electro-Optics Branch Chief
 (202) 394-1974

Naval Weapons Center China Lake, CA 93555 Contact: Mr. George F. Linsteadt Head, IR&D/Technology Utilization Code 3803 (714) 939-2305/2575

Air Force Weapons Laboratory
AFWL/SUR
Kirtland AFB, NM 87117
Contact:
 Ms. Margaret Putnam
 AFW1 STINFO Officer
 (505) 844-4293

#### Subject Areas

#### FLC Labs - Points of Contact

# 31. PHOTOGRAPHY

a. Report on photographic terms and definitions used in law enforcement.

LESP-RPT-0307.00 Oct 1975, "Photographic Terms and Definitions." (GPO: Stock No. 027-000-00373-7, Price \$2.00)

Law Enforcement Standards Laboratory (LESL) National Bureau of Standards Washington, D. C. 20234

b. Technical expertise in selection of filters and film emulsions to best image a particular feature and image processing and interpretation methods to most effectively locate that feature. Advice in the selection of photographic recording techniques and limited instruction in image processing and interpretation methods.

Department of the Army U.S. Army Engineer Topographic Laboratories Fort Belvoir, VA 22060 Contact:

Mr. Kenneth R. Kothe Director, Programs and Resources (703) 664-4812

c. Report on evaluating the spectral response of monochrome television cameras.

LESP-RPT-0310.00 Feb 1977, "A Simple Test for Evaluating the Spectral Responsivity of Monochrome Television Cameras." (GPO: Stock No. 027-000-00445-8, Price 80 cents)

Law Enforcement Standards Laboratory (LESL) National Bureau of Standards Washington, D. C. 20234

d. Expertise in accident photography.

Lawrence Livermore National Laboratory University of California Livermore, CA 94550 Contact:

Mr. Robert G. Purrington, Fire Chief

Mr. Robert G. Purrington, Fire Chief LLNL-P. O. Box 5505 L-384 Livermore, CA 94550 (415) 422-5241

e. Report on image quality of monochrome television cameras.

NBS Special Publication 480-25 Oct 1977, "Image Quality of Monochrome Television Cameras." (NTIS: PB-273 117/2ST PC A02, MF A01)

Law Enforcement Standard Laboratory (LESL) National Bureau of Standards Washington, D. C. 20234

f. Report on juror response to prerecorded videotape trials.

NBS Special Publication 480-30, Jun 1979, "Juror Response to Prerecorded Videotape Trials." (NTIS: PB-297 642)

Law Enforcement Standard Laboratory (LESL) National Bureau of Standards Washington, D. C. 20234

g. Report on transfer of monochrome video information from magnetic tape to motion picture film for archival storage.

NBS Special Publication 480-31 May 1978, "Transfer of Monochrome Video Information from Magnetic Tape to Motion Picture Film for Archival Storage." (NTIS: PB-281 929)

Law Enforcement Standards Laboratory (LESL) National Bureau of Standards Washington, D. C. 20234

h. Guide on selection and application guide to fixed surveillance cameras.

NILECJ-GUIDE-0301.00 Dec 1974, "Selection and Application Guide to Fixed Surveillance Cameras." (NTIS: PB-241 830/9ST; PC A03, MF A01)

Law Enforcement Standards Laboratory (LESL) National Bureau of Standards Washington, D. C. 20234

i. Guide on selection and application of police photographic equipment.

NBS Special Publication 480-23 Aug 1980, "Selection and Application Guide to Police Photographic Equipment." (NTIS: PB-81-103301)

Law Enforcement Standards Laboratory (LESL) National Bureau of Standards Washington, D. C. 20234

j. Loan of photographic equipment including standard cameras (35mm), binocular cameras, movie cameras, and a complete video-tape system.

Argonne National Laboratory 9700 So. Cass Avenue Argonne, IL 60439 Contact: Mr. Bruce C. Huguelet Technology Transfer Manager Building 362, Room E209 (312) 972-3064

Subject Areas

FLC Labs - Points of Contact

ozacza podzie dno speri, ka jou aktoriatacje, kaj period je doju partika, kaj oj kaj kaj kaj kaj kaj kaj kaj k

# 32. PHYSICAL SECURITY SYSTEMS

for physical security of window units.

a. Publication on standards NIJ Standard-0316.00 Aug 1980, "Physical Security of Window Units." (GPO: Stock No. 027-000-01018-1, Price \$1.50)

> Law Enforcement Standards Laboratory (LESL) National Bureau of Standards Washington, D. C. 20234

b. Publication on standards for physical security of door assemblies and components.

NILECJ-STD-0306.00 May 1976, "Physical Security of Door Assemblies and Components." (GPO: Stock No. 027-000-00402-4, Price 85 cents)

Law Enforcement Standards Laboratory (LESL) National Bureau of Standards Washington, D. C. 20234

c. Publication on standards for physical security of sliding glass door units.

NIJ Standard-0318.00 Aug 1980, "Physical Security of Sliding Glass Door Units." (GPO: Stock No. 027-000-01039-3, Price \$1.50)

Law Enforcement Standards Laboratory (LESL) National Bureau of Standards Washington, D. C. 20234

d. Technical data sheet on high security hasps.

"High Security Hasps for Naval Environments." Technical Data Sheet 76-08R, Dec 1977

Naval Civil Engineering Laboratory Port Hueneme, CA 93043 Contact: Mr. Ken Gray Code L64 (805) 982-5927/4284

on prevention of forced entry.

"Prevention of Forced Entry." Technical Data Sheet 81-07, Aug 1981.

Naval Civil Engineering Laboratory Port Hueneme, CA 93043 Contact: Ms. Bettye Keame Code L64 (805) 982-5927

e. Technical data sheet

#### FLC Labs - Points of Contact

f. Technical data sheet on reducing damage to roof drainage downspouts caused by vandalism.

"Roof Drainage Down Spouts." Technical Data Sheet 80-03S, Dec 1980.

Naval Civil Engineering Laboratory Port Hueneme, CA 93043 Contact: Mr. Gary Cook L64 (805) 982-5927/4284

g. Technical data sheet on reinforcement system for chain-link gates.

"Reinforcement System for Chain-link Gates." Technical Data Sheet 78-40R, May 1979.

Naval Civil Engineering Laboratory Port Hueneme, CA 93043 Contact: Mr. Ken Gray Code L64 (805) 982-5927/4284

h. Technical data sheet on key operated security locks and hasps.

"Key-Operated Security Locks and Hasps." Technical Data Sheet 77-07R, May 1979.

Naval Civil Engineering Laboratory Port Hueneme, CA 93043 Contact: Mr. Ken Grav Code L64 (805) 982-5927/4284

i. Technical data sheet on locks for use in achieving physical security.

"Physical Security at Facilities." Technical Data Sheet 76-14, Oct 1976.

Civil Engineering Laboratory Port Hueneme, CA 93043 Contact: Mr. Ken Gray Code L64 (805) 982-5927

j. Report on terms and definitions for door and window security.

NBS Special Publication 480-22 May 1977, "Terms and Definitions for Door and Window Security." (NTIS: PB-267 869/ 6ST; PC A02, MF A01)

Law Enforcement Standards Laboratory (LESL) National Bureau of Standards Washington, D. C. 20234

#### Subject Areas

FLC Labs - Points of Contact

k. Report on role of behavioral science in physical security. NBS Special Publication 480-24, Nov 1977, "The Role of Behavioral Science in Physical Security, Proceedings of the First Annual Symposium, April 29-30, 1976." (NTIS: PB-275 540/357; PC A06, MF A01)

Law Enforcement Standards Laboratory (LESL) National Bureau of Standards Washington, D. C. 20234

NBS Special Publication 480-32 Jun 1978, "The Role of Behavioral Science in Physical Security. Proceedings of the Second Annual Symposium, March 23-24, 1977." (NTIS: PB-283 927)

Law Enforcement Standards Laboratory (LESL) National Bureau of Standards Washington, D. C. 20234

NBS Special Publication 480-38, Dec 1979, "The Role of Behavioral Science in Physical Security. Proceedings of the Third Annual Symposium, May 2-4, 1978." (NTIS: PB80-148661)

Law Enforcement Standards Laboratory (LESL) National Bureau of Standards Washington, D. C. 20234

NBSIR 81-2207R, Feb 1981, "The Role of Behavioral Science in Physical Security. Proceedings of the Fourth Annual Symposium, July 25-26, 1979."

Law Enforcement Standards Laboratory (LESL) National Bureau of Standards Washington, D. C. 20234

1 . Report on vigilance research and nuclear security: critical review and potential applications to security quard performance.

NBS-GCR-80-201 Jun 1980, "Vigilance Research and Nuclear Security: Critical Review and Potential Applications to Security Guard Performance."

Law Enforcement Standards Laboratory (LESL) National Bureau of Standards Washington, D. C. 20234

m. Technical information

about Covert Duress

which is an advanced

approach in the area

of physical protection

Alarm System (CDS)

and represents an

essential component

response capability.

Tested at Livermore

and Sandia National

Laboratories.

of an effective quard

# U. S. Army Mobility Equipment Research & Development Command Fort Belvoir, VA 22060 Contact:

Mr. Robert Reich
Components Branch
Physical Security Equipment Division
CS/Cl Laboratory
ATTN: DRDME-X1
(703) 664-5584

FLC Labs - Points of Contact

- n. Technical expertise and information about the design and operation of the electronic security systems employed at the 1980 Winter Olympics at Lake Placid, New York.
- U.S. Army Mobility Equipment Research & Development Command
  Fort Belvoir, VA 22060
  Contact:
  Colonel Cornell, Project Manager
  Physical Security Equipment
  USAMERADCOM
  ATTN: DRME-PSE
  (703) 664-5794
- o. Technical consultation on hardware and soft-ware of security radar for bases and installations. Further development of systems can be accomplished for local agencies if funding is provided.
- Harry Diamond Laboratories 2800 Powder Mill Road Adelphi, MD 20783 Contact: Mr. Clifford Lanham (202) 394-2296
- p. Variety of devices, tools, and expert consultants to assist on any area pertaining to locking devices.
- Argonne National Laboratory 9700 So. Cass Avenue Argonne, IL 60439 Contact: Mr. Bruce C. Huguelet Technology Transfer Manager Building 362, Room E209 (312) 972-3064

#### Subject Areas

#### FLC Labs - Points of Contact

# 33. PROTECTIVE CLOTHING

- a. Report on standards for ballistic resistant protective materials in press.
- b. Information about improved protective gear for fire fighters against heat, flame, moisture, impact, and penetration.
- Information about a high-impact face mask for possible use by riot-control police.
- d. Information about a ballistic sport coat of a 3-button, single breasted commercial type made by a custom clothing manufacturer and available in a variety of sizes and colors.
- e. Information about a ballistic raincoat of a single breasted fly front, split shoulder quarter lined type with convertible collar, two inside pockets and outside diagonal welts. Available in all sizes and lengths in tan or black.

NIJ Standard-0108.00, "Ballistic Resistant Protective Materials."

Law Enforcement Standards Laboratory(LESL) National Bureau of Standards Washington, D. C. 20234

"Improved Clothing for Fire Fighters."
Marshall Space Flight Center, AL
Contact:
Mr. Stan Miller
New Technology Representative
NASA Ames Research Center
Moffett Field, CA 94035
(415) 965-6471

"Lightweight Face Mask," LAR-12803.
Langley Research Center
Hampton, VA 23665
Contact:
Mr. Lester J. Rose
Technology Utilization and
Applications Program Office
(804) 827-3281

- U.S. Army Natick Research and Development Command Natick, MASS 01760 Contact: Mr. Anthony Pingiaro Clothing Designer ATTN: DRDNA (617) 633-5446
- U.S. Army Natick Research and Development Command Natick, MASS 01760 Contact: Mr. Anthony Pingiaro Clothing Designer ATTN: DRDNA (617) 633-5446

- f. Information about front and back inserts for body protection to be worn with body armour vest or separately.
- g. Information about an over-the-head type undergarment for small arms protection with tails for tucking into the trousers and removable back and front 9-ply ballistic protective inserts.
- h. Information about an over-the-head type undergarment designed for Drug Enforcement Administration female agents. Available in 8 sizes and should fit most female law enforcement personnel.
- i. Information about a raid jacket of a single breasted, hip length design developed to provide small arms penetration protection. Available in 4 sizes to fit most law enforcement personnel.

#### FLC Labs - Points of Contact

- U.S. Army Natick Research and Development Command Natick, MASS 01760 Contact: Mr. Anthony Pingiaro Clothing Designer ATTN: DRDNA (617) 633-5446
- U.S. Army Natick Research and Development Command Natick, MASS 01760 Contact: Mr. Anthony Pingiaro Clothing Designer ATTN: DRDNA (617) 633-5446
- U.S. Army Natick Research and Development Command Natick, MASS 01760 Contact: Mr. Anthony Pingiaro Clothing Designer ATTN: DRDNA (617) 633-5446
- U.S. Army Natick Research and Development Command
  Natick, MASS 01760
  Contact:
   Mr. Anthony Pingiaro
   Clothing Designer
   ATTN: DRDNA
   (617) 633-5446

#### Subject Areas

# 34. RECORDS MANAGEMENT

- a. Information on a video file for law enforcement. With this computerized system the actual document is recorded, complete with photos and graphic material, and a picture of the document is available instantly.
- b. Information about the design and operation of an image capture and analysis system developed for high-speed document scanning. This project is supporting the U.S. Postal System in achieving an electronic message service capability.

#### FLC Labs - Points of Contact

NASA Spinoff 1977, P 77.

NASA Langley Research Center Hampton, VA 23665 Contact:
Mr. Lester Rose
Technology Utilization and

Applications Office (804) 827-3281

Naval Ocean Systems Center San Diego, CA 92152 Contacts: Mr. F. C. Martin

(714) 225-7980 Mr. L. A. Wise

(714) 225-2742 Mr R W Basing

Mr. R. W. Basinger (714) 225-2742

# 35. RESEARCH

Information about ongoing research projects in the following areas:

The Evaluation of
Selected Genetically
Controlled Polymorphic
Enzymes and Proteins
Present in Human Blood
for Bloodstain Individualization

Detection of ABO Blood Group Substances in Hair

An Assessment of the Applicability of Isoelectric Focusing to Routine Bloodstain Analysis

Federal Bureau of Investigation
Department of Justice
FBI Laboratory
FBI Academy
Quantico, VA 22135
Contact:
Dr. Eugene Rieder
(703) 640-6131

Sex Determination of Forcibly Removed Hairs by Means of Chromosome Staining Assessment of Use of PGM Subtyping by Electrophoresis on Agarose Gel in Routine Forensic Analysis Assessment of the Applicability of Electrophoretic Analysis on Agarose Gel of Carbonic Anhydrase and Peptidase As Forensic Tools Seminal Plasma Specific Antibody Development of HPLC System for Steroids Separation Analysis of Explosives by Ion Chromatography Analysis of Explosive Residues by Ion Chromatography Detection of Cyanide and Its Reaction Products in Human Tissues by Ion Chromatography Survey of Analytical Methods in Grease and Oil Analysis: Use of Liquid and Gas Chromatography.

#### 36. RIOT CONTROL

a. Publication on standards for portable ballistic shields.

b. New test report under preparation on riot and crash helmets. NILECJ-STD-0103.00 May 1974, "Portable Ballistic Shields." (NTIS: PB-238 604/3ST; PC A02)

Law Enforcement Standards Laboratory (LESI National Bureau of Standards Washington, D. C. 20234

Sponsored by Technology Assessment Program Information Center (TAPIC), National Institute of Justice (NIJ)

Law Enforcement Standards Laboratory (LESI National Bureau of Standards Washington, D. C. 20234

#### Subject Areas

c. M-17 protective masks
(gas masks) available
to loan on an emergency
basis. Masks are for
the protection against
riot-control agents.
Cannot be used for toxic
atmospheres or oxygenstarved atmospheres.
Training is available
by appointment.

#### FLC Labs - Points of Contact

Argonne National Laboratory 9700 So. Cass Avenue Argonne, IL 60439 Contact: Mr. Bruce C. Huguelet

Mr. Bruce C. Huguelet
Building 362, Room E209
Technology Transfer Manager
(312) 972-3064

#### 37. SECURITY CONSULTANTS

a. Directory of security consultants.

LESP-RPT-0309.00 Oct 1975, "Directory of Security Consultants."

Law Enforcement Standards Laboratory (LESL) National Bureau of Standards Washington, D. C. 20234

#### 8. TUNNEL DETECTION

a. Expertise and information on new hardware developments for detection of cavities and voids.

U.S. Army Mobility Equipment Research & Development Command
Fort Belvoir, VA 22060
Contact:
Mr. Frank Tremain
Sensors & Surveillance Division

Counter Surveillance/Counter Intrusion

Laboratory
ATTN: DRME-XS
(703) 664-5876

#### 39. VEHICLES

a. Report on terms and definitions used for police cars.

LESP-RPT-0401.00 May 1974, "Terms and Definitions for Police Patrol Cars." (NTIS: PB-238 312/OST; PC A02, MF A01)

Law Enforcement Standards Laboratory (LESL) National Bureau of Standards Washington, D. C. 20234

#### FLC Labs - Points of Contact

b. Report on state of the art of police patrol cars.

LESP-RPT-0403.00 Jul 1975, "The Police Patrol Car: State of the Art." (GPO: Stock No. 027-000-00345-1, Price \$1.10) (NTIS: PB-249 774/1ST; PC A04, MF A01)

Law Enforcement Standards Laboratory (LESL) National Bureau of Standards Washington, D. C. 20234

- c. Information about an emergency lighting system with an extendable mast for the rooftop of emergency vehicles. Beacon visible for several miles and most are retractable.
- NASA Spinoff 1980, P 79.

NASA Langley Research Center

Hampton, VA 23665
Contact:
Mr. Lester Rose
Technology Utilization and Applications Office
(804) 827-3281

d. Report on review of emergency vehicle warning devices.

LESP-RPT-0501.00 May 1972, "Emergency Vehicle Warning Devices: Interim Review of the State of the Art Relative to Performance Standards." (NTIS: PB-211 938; PC A05, MF A01)

Law Enforcement Standards Laboratory (LESL) National Bureau of Standards Washington, D. C. 20234

e. Report on emergency vehicle sirens.

LESP-RPT-0502.00 Sep 1974, "Summary Report on Emergency Vehicle Sirens."

Law Enforcement Standards Laboratory (LESL) National Bureau of Standards Washington, D. C. 20234

f. Report on automatic vehicle location techniques.

LESP-RPT-0205.00 Sep 1974. "Automatic Vehicle Location Techniques for Law Enforcement Use."

Law Enforcement Standards Laboratory (LESI) National Bureau of Standards Washington, D. C. 20234

#### Subject Areas

#### FLC Labs - Points of Contact

g. Report on state of the art of emergency vehicle warning lights. "Emergency Vehicle Warning Lights - State of the Art." NBS Special Publication 480-16 Sep 1978. (GPO: Stock No. 003-003-01901-1, Price \$3.50. NTIS: PB-289-723)

Law Enforcement Standards Laboratory (LESL) National Bureau of Standards Washington, D. C. 20234

h. Report on investigation of the high speed hazards of steel belted radial tires on police patrol cars. "Report on an Investigation of the High Speed Hazards of Steel Belted Radial Tires on Police Patrol Cars." NBS Special Publication 480-18, June 1977 (GPO: Stock No. 003-003-01786-8, Price \$1.60. NTIS: PB 268 511/3ST; PC A03, MF A01)

Law Enforcement Standards Laboratory (LESL) National Bureau of Standards Washington, D. C. 20234

i. Report on the economic efficiency of acquisition, operation and disposition of police patrol cars.

"The Police Patrol Car: Economic Efficiency in Acquisition, Operation, and Disposition." (GPO: Stock No. 003-003-01837-6, Price \$3.00. NTIS: PB-257 466/3ST; PC AlO, MF AO1, NBS Special Publication 480-15, April 1978.

Law Enforcement Standards Laboratory(LESL) National Bureau of Standards Washington, D. C. 20234

j. Report on the development and testing of a highly directional dual-mode electronic siren. NBS Special Publication 480-28 Feb 1978, "The Development and Testing of a Highly Directional Dual-Mode Electronic Siren." (NTIS: PB-280 618)

Law Enforcement Standards Laboratory (LESL) National Bureau of Standards Washington, D. C. 20234

#### FLC Labs - Points of Contact

k. Report on some psychophysical tests of the conspicuities of emergency vehicle warning lights. NBS Special Publication 480-36 Jul 1979, "Some Psychophysical Tests of the Conspicuities of Emergency Vehicle Warning Lights." (GPO: Stock No. 003-003-02085-1)

Law Enforcement Standards Laboratory (LESL) National Bureau of Standards Washington, D. C. 20234

 Report on emergency vehicle warning systems. NBS Special Publication 480-37 May 1981, "Emergency Vehicle Warning Systems." (NTIS: PB81-219396)

Law Enforcement Standards Laboratory (LESL) National Bureau of Standards Washington, D. C. 20234

m. Report on methods of suppressing automotive interference. NBS Special Publication 480-44 Dec 1981, "Methods of Suppressing Automotive Interference."

Law Enforcement Standards Laboratory (LESL) National Bereau of Standards Washington, D. C. 20234

n. Report on field strength measurements of speed measuring radar units. NBSIR 81-2225 May 1981, "Field Strength Measurement of Speed Measuring Radar Units."

Law Enforcement Standards Laboratory (LESL) National Bureau of Standards Washington, D. C. 20234

o. Report on the characterization of auto headlights glass by refractive index and density. NBSIR 81-2286 Oct 1981, "The Characterization of Auto Headlights Glass by Refractive Index and Density."

Law Enforcement Standards Laboratory (LESL) National Bureau of Standards Washington, D. C. 20234

#### Subject Areas

p. Guide on high speed patrol car tires.

#### FLC Labs - Points of Contact

NBS Special Publication 480-33 Jul 1979, "Guide to High Speed Patrol Car Tires." (NTIS: PB-298 273)

Law Enforcement Standards Laboratory (LESL) National Bureau of Standards Washington, D. C. 20234

# 40. WATER SURVEILLANCE

Equipment and expertise to apprehend poachers. Now in use on the Columbia River. Includes night vision devices, underwater detection devices, surveillance craft, and underwater monitoring. With modifications for locale, this technology could prove useful in monitoring the oyster, shrimp, clam and lobster industries as well as for salmon.

Naval Underwater Systems Center
New London Laboratory
New London, CT 06320
Contact:
 Mr. Michael C. Ahrens
 Code 0702
 Head, Office of Special Programs
 Development
 (203) 447-4908

b. Information about the use of pigeons for the over-the-water search phase of at sea rescues. The probability of detection was increased by a factor of 2.4 during sea trials.

Naval Ocean Systems Center San Diego, CA 92152 Contacts: Mr. J. V. Simmons (808) 254-4439 (H1)

Dr. J. M. Stallard (808) 254-4377 (H1)

# 41. WEAPON DETECTION

Report on tests of hand-held metal weapons detectors.

LESP-RPT-0603.00 Mar 1977, "Tests of Hand-Held Metal Weapon Detectors." (GPO: Stock No. 027-000-00454-7, price 35 cents)

Law Enforcement Standards Laboratory(LESL) National Bureau of Standards Washington, D. C. 20234

#### FLC Labs - Points of Contact

for walk-through metal detectors for use in weapons detection.

b. Publication for standards NILECJ-STD-0601.00 Jun 1970, "Walk-Through Metal Detectors for Use in Weapons Detection." (NTIS: PB-242 015/6ST; PC A92, MF A01)

> Law Enforcement Standards Laboratory (LESL) National Bureau of Standards Washington, D. C. 20234

c. Publication on standards for hand-held metal detectors for use in weapons detection.

NILECJ-STD-0602.00 Oct 1974, "Hand-Held Metal Detectors for Use in Weapons Detection." (NTIS: PB-242 015/6ST; PC A02, MF A01)

Law Enforcement Standards Laboratory (LESL) National Bureau of Standards Washington, D. C. 20234

d. A number of "electro Search," hand-held, metal detector's of the hairpin loop type and powered by two, 9volt batteries. Could be loaned on an emergency basis. Training in the use and care of the equipment could be made locally available.

Argonne National Laboratory 9700 So. Cass Avenue Argonne, IL 60439 Contact:

Mr. Bruce C. Huguelet Technology Transfer Manager Building 362, Room E209 (312) 972-3064

#### 42. OTHER

a. Directory of law enforcement and criminal justice associations and research centers. NBS Special Publication 480-20 March 1978, "Directory of Law Enforcement and Criminal Justice Associations and Research Centers." (NTIS: PB-279 246/ 3ST; PC A04, MF A01)

Law Enforcement Standards Laboratory (LESL) National Bureau of Standards Washington, D. C. 20234

b. Report on survey of clothing requirements for uniformed law enforcement officers.

NBS Special Publication 480-29 Apr 1978, "Survey of Clothing Requirements for Uniformed Law Enforcement Officers." (NTIS: PB-279 923)

Law Enforcement Standards Laboratory (LESL) National Bureau of Standards Washington, D. C. 20234